The Monitor

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Members of the water stakeholder committee (below) observed remediation at the Bunker Hill Superfund site in Idaho. At left, air stakeholder committee members learned about the Northwest's pollution problems.

AMS Center

Stakeholder Meetings Offer Mutual Benefits

Based on past experiences, the next meetings of the AMS Center's air and water stakeholder committees, which are scheduled for spring 2002, are bound to result in benefits for everyone. The meetings include stakeholders from various groups and organizations, expert speakers on subjects ranging from air monitoring programs to the health effects of various toxins, visiting vendors, and staff representing the U.S. EPA's ETV Program and area environmental agencies. The next stakeholder meetings are expected to be held in April in Georgia (air committee) and in May in Wisconsin (water committee).

Members of the AMS Center's stakeholder committees represent diverse groups and have a variety of perspectives and environment-related assignments, from federal and state regulatory agencies to engineering and legal firms. Meetings are rotated around the country so members can learn from local and regional environmental and regulatory experts invited to give presentations and visit local environmental sites and test facilities. The meetings are facilitated by Battelle staff members Gretchen Hund (air committee) and Todd Peterson (water committee).

The spring sessions are expected to be similar to previous AMS Center stakeholder committee meetings, providing a mixture of updates on ETV's plans, the AMS Center's current and planned verification tests, environmental issues, sharing knowledge with other committee members and AMS Center staff, listening to interested visitors and vendors, and learning about future issues and regulatory actions. Each session concludes with stakeholders identifying needed air and water monitoring technologies and prioritizing verification tests.

Those attending the October meetings learned that the ETV Program has completed verifications of 164 environmental technologies since its beginnings in 1995. The AMS Center completed 21 verifications during the 2001 fiscal year bringing the Center's total to 35 technology verifications since 1997. Observers at the October meetings included a visitor from Japan who is considering whether to recommend a technology verification program in his country, and several interested vendors. Here are brief samples of presentations given during the October meetings.

■ **Air stakeholder committee meeting, Seattle, WA.** Keith Rose of U.S. EPA's Region 10 office described the air quality monitoring programs in the Pacific Northwest, reported on monitoring trends, and listed the region's major technology needs.

Mike Gilroy of the Puget Sound Air Control Authority said his agency operates 11 monitoring sites and is responsible for air quality reporting and forecasting for Seattle and Tacoma. His agency also provides half of the state's data on fine particulate matter and has the largest $PM_{2.5}$ database in the country.

(See Benefits on page 2)

Benefits *(from page 1)*

David Welsh, executive director of the Northwest Environmental Business Council, presented ideas about how ETV could reach potential vendors.

Tim Hanley, an environmental scientist for the U.S. EPA and a member of the air stakeholder committee, listed the three key monitoring areas nationally: particles, ozone and the pollutants that contribute to the formation of ozone, and air toxics.

Lindene Patton, director of the Risk Management and Executive Counsel of Zurich U.S. Specialties and a stakeholder committee member, described the growing risks and legal actions due to the health effects of mold spores in the home and workplace. Several other stakeholders discussed the progress of current verification tests, the overall approach of the AMS Center, technology categories to be considered for future verification tests, and ways they could provide additional assistance.

■ **Water stakeholder committee meeting, Coeur d'Alene, ID.** Water quality of the Coeur d'Alene River and Lake Coeur d'Alene was the topic of Paul Woods, a hydrologist and limnologist with the U.S. Geological Survey Boise, ID. More than a century of mining silver, gold, and lead ores and smelting them has contaminated the groundwater and waterways. In collaboration with the Idaho Department of Environmental Quality and U.S. EPA, USGS is monitoring water quality to identify the release, fate, and transport of contaminants.

Water quality and monitoring were also the concerns of Philip Cernera of the Coeur d'Alene Tribe, which claims ownership of the southern part of the lake. The tribe is working with state and federal agencies to assess and remediate damages to natural resources (e.g., fish, waterfowl, and aquatic vegetation) from a century of mining. The tribe operates 13 water quality monitoring stations in the lake, which have shown that metals in the sediments need to be reduced by 90 to 95 percent to meet current environmental standards. The cleanup project is expected to take 30 years and cost from $350 million to $1.5 billion.

A view of water quality issues from the opposite end of the country was provided by Vito Minei, director of both the Department of Health Services' Environmental Quality Division of Suffolk County, NY, and the Peconic National Estuary Program, and a member of the AMS Center's water stakeholder committee. He described the intense interest in water quality monitoring in Long Island Sound, which was prompted by the mass die-off in 1999 and 2000 of lobsters, the most important fishery in New York state.

Continuous monitoring buoys were installed in New York Sound to track dissolved oxygen, temperature, and salinity and to investigate the possible effects on lobsters of paramoeba, toxics, and other environmental stresses.

Stakeholders took advantage of their meeting location to visit the Bunker Hill site, the nation's second-largest Superfund Site.

Following is a summary of ongoing and planned verification test opportunities, as discussed at the October stakeholder committee meetings:

Ammonia CEMs. A verification test is being planned for technologies that detect ammonia "slip" emissions. Ammonia "slip" refers to the amount of unreacted ammonia that may bypass a NO_x reduction catalyst and escape into the atmosphere. Vendors are invited to attend an EPA Region 1 meeting on January 30 in Boston to discuss ammonia slip monitoring technology needs, possible grants, and verification tests. Contact: Ken Cowen, 614-424-5547 or cowenk@battelle.org.

Mercury CEMs. Phase 2 of this verification test is to be conducted next spring at one or more full-scale facilities, such as a power plant or incinerator. One possible site is the TOSCA incinerator at Oak Ridge, TN. A notice of the proposed test has been sent to CEM vendors. Contact: Tom Kelly, 614-424-3495 or kellyt@battelle.org.

Multi-metals CEMs. A verification test of an X-ray-based continuous emission monitor for metals (XCEM), was conducted in collaboration with the U.S. Army's Construction Engineering Research Laboratory at its demilitarization incinerator at the Tooele (UT) Army Depot.

This test evaluated the instrument's performance in determining multi-metal concentrations in combustion source emissions. The draft verification report and statement are being prepared for review. Contact Tom Kelly (see above).

Multi-parameter water probes. Four vendors are expected to participate in this test, which is to be conducted in early spring in the Charleston, SC, area. The AMS Center is collaborating on the test with the National Oceanic and Atmospheric Administration's (NOAA) Center for Coastal Environmental Health and Biomolecular Research (CCEHBR) in Charleston, which offers freshwater, salt water, and a controlled site for testing. Contact: Jeff Myers, 614-424-7705 or myersjd@battelle.org.

Portable arsenic water analyzers. Four vendors of portable arsenic water analyzers participated in the verification test, which began in October and was completed early in November. The technologies were tested for monitoring arsenic in the 1-100 parts per billion (ppb) range in fresh water, well water, and public drinking water. The draft verification reports and statements are being prepared for review. Contact Adam Abbgy, 614-424-5484 or abbgya@battelle.org.

Portable emission analyzers. Several vendors have expressed interest in submitting technologies for the test, which will measure the instruments' capabilities to detect NO/NO_2, SO_2, CO, and oxygen (O_2) in combustion emissions. The test plan is to be approved in January. Contact Tom Kelly (see above).

Upcoming Events

January

27-31 Water Sources Conference and Exhibition, Alexis Park Resort, Las Vegas, NV

March

17-22 PITTCON 2002 Conference, New Orleans, LA

April

25-26 AMS Center's air stakeholder committee meeting, Pine Mountain, GA

May

7-9 14th Annual Enviro-Expo Conference, Boston, MA

TBD AMS Center's water stakeholder committee meeting

20-23 Water Quality Monitoring 2002 Conference: Building a Framework for the Future, Madison, WI

June

16-20 Annual American Water Works Association Conference and Exposition, New Orleans, LA

23-27 95th Annual Conference and Exposition of Air and Waste Management Association, Baltimore, MD